

REMARKS

The present application includes claims 1-50. Claims 1-50 have been rejected by the Examiner. By this Amendment, claims 1, 18, 29, 38, and 47 have been amended.

By this Response, claims 29, 38 and 47 have been amended to recite that the medical image and medical information are associated and stored together for later retrieval in a medical-image format compatible format based on a common identification element. Claims 1, 18, 29, 38 and 47 have been amended to reflect the automated nature of the association.

Claims 1-10, 12-24, 26-35, and 37-46 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Pat. No. 6,260,021 ("Wong") in view of U.S. Pat. No. 6,678,703 ("Rothschild") and further in view of U.S. Pat. No. 7,000,186 ("Gropper").

Claims 11, 25, and 36 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Wong in view of Rothschild and further in view of Gropper and even further in view of U.S. Pat. No. 6,078,925 ("Anderson").

Claims 47-50 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Wong in view of Gropper.

The Applicant now turns to the rejection of claims 1-10, 12-24, 26-35, and 37-46 under 35 U.S.C. § 103(a) as being unpatentable over Wong in view of Rothschild and further in view of Gropper.

As previously discussed, Wong generally relates to computer-based medical image distribution. As stated at col. 3, lines 18-21, Wong discloses an approach to resolve

incompatibilities and lack of uniformity of access to PAC and RI systems. Beginning at col. 10, line 48, Wong discusses an object server receiving client object requests generated by a GUI from user input. The object server interprets the requests and forwards them to appropriate image and/or report interface engines. The responses from the engines are composed and transmitted to the client workstation for presentation by the GUI to the user.

As an initial matter, the present application defines a common identification element as information such as patient name, not a user interface as opined by the Examiner. Wong does not teach use of such a common identification element in associating a medical image and medical information. Thus, Wong fails to teach or suggest transmitting and storing medical image and either medical information or a link to the medical information together in association in a medical image format compatible format for retrieval by common identification element. Wong also fails to teach or suggest automatically translating medical information format and automatically creating an association between the medical information and either the translated medical information or a link to the translated medical information.

In addition, Wong does not teach or suggest requesting or storing links or references to the desired image and/or report information. More particularly, Wong does not teach or suggest the image and/or report interface engines providing links to the requested image and/or report information. Rather, Wong teaches the requested image and/or report information being returned in the response from the appropriate interface engines. When a request is made by a user for image and/or report information, that image and/or report information is returned by the appropriate interface engines for display to the user. Thus, transmitting, storing, or returning links or references to the requested image and/or report information would defeat the purpose of Wong, as the image and/or report information are needed to be displayed to the user.

Rothschild generally relates to medical image management. More specifically, Rothschild discusses, beginning at col. 17, line 66, storing each image at three separate locations, including the imaging center and two central data servers. As stated at col. 8, lines 22-29, Rothschild provides a medical image management system that pushes electronic records containing medical images to healthcare providers outside of a medical imaging center soon after the images are taken so that healthcare providers may view the images without need to remotely access a central image storage site. Thus, Rothschild aims to distribute and store electronic records containing medical images.

As previously discussed, Rothschild does not teach or suggest requesting or storing links or references to the desired image and/or report information. More particularly, Rothschild does not teach or suggest the imaging center or central data servers requesting or storing links to medical images. Rather, Rothschild is designed to distribute and store the medical images themselves. Thus, requesting, transmitting, and/or storing links or references to images would defeat the purpose of Rothschild. Moreover, Rothschild does not teach or suggest automatically associating a medical image and medical information for transmission in a medical-image format compatible format based on a common identification element.

Gropper relates to creating a single electronically-transmittable document have links in the document which do not affect the integrity of the document. Abstract. The document includes a text portion and an endnote portion including link information to other ancillary information. Abstract. The endnote provides links to ancillary information but does not ensure that they are in a common or compatible format. Col. 1, lines 8-12. In fact, the report of

Gropper (the medical information or non-image data) is expressly not modified. See, e.g., col. 2, lines 10-13. Thus, to convert the medical report of Gropper into a medical-image compatible format would be antithetical to the teaching and objective of Gropper. See, e.g., col. 2, lines 48-50. Put more simply, Gropper teaches away from such a conversion. This limitation, however, is recited in the pending claims of the present application.

The linking of Gropper occurs within one document rather than in an association between two “documents”, a medical image and medical information (or a link to that medical information that is associated with but is not an internal part of the medical image). Additionally, the linking of Gropper that occurs in the endnote to a text report is a manual process completed by a user. Col. 4, lines 39-43. However, the medical image and medical information of the pending claims are automatically associated based on a common identification element. Gropper also does not teach or suggest storing and transmitting medical images and related medical information together in a medical-image format compatible format.

As discussed above, none of Wong, Rothschild, or Gropper, taken alone or in various combinations, teaches or fairly suggests the combination of limitations taught in any of independent claims 1, 18, 29, 38 and 47, as well as their dependent claims. Therefore, the Applicant respectfully submits that the rejection of claims should be withdrawn and a notice of allowance should issue.

The Applicant now turns to the rejection of claims 11, 25, and 36 under 35 U.S.C. § 103(a) as being unpatentable over Wong in view of Rothschild and further in view of Gropper and even further in view of Anderson. Anderson relates to a computer program product for database relational extenders. As disclosed beginning at col. 5, line 22, relational extenders define and implement new complex data types in a database. A relational extender essentially extends relational database tables with the new data types. As shown in Fig. 3 and discussed at col. 6, lines 26-35, Anderson may suggest storing a reference to an external file as part of a general relational extender model. As indicated at col. 8, lines 8-10, the external file contains actual object data and may reside on a file server.

However, as discussed above, the requesting, transmission, and/or storage of links to medical information and/or medical images would defeat the purpose of Wong and Rothschild. Thus, there would be no motivation to combine Anderson with Wong and Rothschild as any capability of storing a reference to an external file provided by Anderson would run counter to the purpose of Wong to provide such information or images to a client on request and Rothschild's purpose to distribute copies of images. Additionally, the text report with endnote system of Gropper does not address conversion or translation from an HL7 format to an SQL format. Furthermore, as discussed above, none of Wong, Rothschild, Anderson or Gropper teach or suggest associating a medical image and medical information for transmission in a medical-image format compatible format based on a common identification element.

Therefore, the Applicant respectfully submits that claims 11, 25, and 36 are in condition for allowance because the corresponding independent claims from which they depend are allowable, as discussed above.

The Applicant now turns to the Examiner's rejection of claims 47-50 under 35 U.S.C. § 103(a) as being unpatentable over Wong in view of Gropper. However, as discussed above, neither Wong nor Gropper teaches or suggests a medical image and medical information automatically associated for transmission in a medical-image format compatible format based on a common identification element. Additionally, neither Wong nor Gropper teaches or suggests requesting such an associated medical image and medical information from a remote data center. Neither Wong nor Gropper teaches or suggests providing a link to medical information from a medical information source to an interface unit, providing a link to a medical image from a medical image source to an interface unit and combining the link to the medical information and with the link to the medical image. Neither Wong nor Gropper then teaches providing that combination to the remote data center. Therefore, neither Wong nor Gropper can render the combination of limitations found in independent claim 47 and dependent claims 48-50 unpatentable.

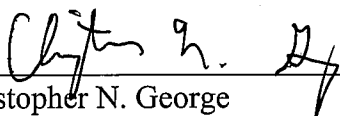
CONCLUSION

It is submitted that the present application is in condition for allowance and a Notice of Allowability is respectfully solicited. If the Examiner has any questions or the Applicant can be of any assistance, the Examiner is invited and encouraged to contact the Applicant at the number below.

The Commissioner is authorized to charge any necessary fees or credit any overpayment to the Deposit Account of GEMS-IT, Account No. 50-2401.

Respectfully submitted,

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